

**REMARKS****I. Status of the Claims:**

Claims 1-34 are pending in this application. Claims 1-20 are withdrawn from further consideration by the Examiner per telephone conversation held on May 2, 2006.

By this Amendment, claims 21, 26, 31, 33 and 34 have been amended to address informalities. The Applicant believes that no new matter has been introduced by this Amendment. Upon entry of the Amendment, claims 1-34 would be pending.

**II. Restriction Requirement:**

In the Office Action of May 17, 2006, the Examiner requires restriction to one of the following groups:

- I. Claims 1-8, drawn to a wiring error detection circuit;
- II. Claims 9-20, drawn to a power line surge protection device; and
- III. Claims 21-34, drawn to a grounding module.

In response, the Applicant affirms the provisional election to pursue prosecution of Group I, which includes at least claims 1-17 and 19-29. This election is made with traverse.

The Applicant respectfully submits that: (1) all groups of claims are properly presented in the same application; (2) undue diverse searching should not be required; and (3) all claims should be examined together. For the foregoing reasons, it is respectfully submitted that the restriction/election requirement should be withdrawn and an action on the merits of all the claims is respectfully solicited.

**II. Claim Objections:**

Claims 21 is objected to because of some informalities. Specifically, the Examiner seeks clarification as to the “ground” being claimed. To address this issue, claim 21 has been amended to clarify that the ground is the AC outlet’s ground.

Claims 33-34 are objected to because of a minor informality as to an antecedent basis with regard to the language “the LED”. Claims 33 and 34 have been amended to address the minor issue.

Claim 26 is objected to because of a minor informality as to the language “third” LED. Claim 26 has been amended to address this minor issue.

Claim 31 is objected to because of a minor informality as to the language “fourth” LED. Claim 31 has been amended to address this minor issue.

In view of the foregoing, reconsideration and withdrawal of these objections are respectfully requested.

**III. Rejection under 35 U.S.C. § 112, ¶1:**

Claims 21-34 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Applicant respectfully traverses this rejection for the reasons set forth below.

**A. Claim 21:**

As best understood, in the Office Action, the Examiner appears to request additional clarification as to the function of the diode 1010 and resistor 1005 in the example of Fig. 10 particularly in context with the interconnection of the female outlet.

As shown and described in the specification with reference to Fig. 10, the diode 1010 and resistor 1005 along with the capacitor 1015 provide an example of a power supply circuitry for the exemplary detection circuit 1000. The resistor 1005 is a current limiting resistor, the diode is a half-wave rectifier (e.g., to provide a positive value) and the capacitor 1015 charges and discharges. These components, however, are not part of the connection between the AC plug (e.g., 1110) and the female outlet, (e.g., 1160). For example, the specification states: "The female outlet 1160 includes a first, second and third conductor (conductors not shown) for connecting to the first, second and third conductors, respectively, of the AC plug 1110." See page 18, para. [0059]. As would be understood by one of ordinary skill in the art in view of Applicant's disclosure, the female outlet 1160 can be connected directly to the conductors of the AC plug 1110 (e.g., not connected across the circuit 1000). It would be well within the capability of one of ordinary skill in the art to connect the female outlet to the conductors of the AC plug to allow operability of the female outlet.

Accordingly, the specification is believed to provide sufficient support to enable one of ordinary skill in the art to make and/or use the arrangement of claim 21. Thus, reconsideration and withdrawal of this rejection are respectfully requested. Should the Examiner have any further questions concerning the operation of the exemplary embodiments, the Examiner is invited to contact the undersigned.

**B. Claims 33-34:**

In the Office Action, the Examiner appears to request additional clarification as to how the presence or absence of an AC outlet's ground will control illumination of "the first LED by itself". The Applicant respectfully submits that at least the examples shown and describe with reference to Figs. 10-12 would enable one of ordinary skill in the art to make and/or use the inventions of claims 33 and 34.

For example, the specification on page 18, paragraph [0058] states:

Similar to the circuit 100, the circuit 1000 includes the LEDs 1071, 1072 for indicating whether or not a ground is present and for indicating whether or not a wiring problem exists in an AC outlet to which the circuit 100 is connected. Circuit 1000 additionally, includes an LED 1073 for indicating by itself whether or not a wiring problem exists in an AC outlet to which the circuit 1000 is connected.

The specification on page 19, paragraph [0061] further states:

As further shown in Figure 12, the LED covers 1210, 1220, 1230 are positioned above the LEDs 1073, 1072, 1071 of the wiring error detection circuit 1000 of Figure 10 so that the LEDs 1073, 1072, 1071 may be viewed when they are illuminated. In operation, the LED covers 1220, 1230 are used to indicate whether or not the ground 1003 (of Figure 10) is present when the module 1100 is inserted into an AC outlet. **For example, the LED cover [1220] indicates that a ground is not present when the LED it covers is solely illuminated and the LED cover 1230 indicates that a ground is present when the LED it covers is solely illuminated.** In addition, both LEDs 1220, 1230 indicate that there is a problem with the wiring of the AC outlet to which the module 1100 is plugged into when the LEDs they cover are illuminated at the same time. The LED cover 1210 also indicates that there is a problem with the wiring of the AC outlet to which the module 1100 is plugged into when the LED it covers is solely illuminated.

(emphasis added)

In the exemplary embodiments, the ground 1003 is connected to the ground of an AC outlet when the AC plug is engaged with the AC outlet. See Figure 10 and accompanying text. As is

apparent from the above cited portions of the specification, the LED covers 1220 and 1230 or, in other words, the respective LEDs 1072 and 1071, may each be solely illuminated or both under appropriate circumstances (e.g., presence or absence of the AC outlet's ground), such as that claimed in claims 33 and 34.

Accordingly, it is respectfully submitted that the specification provides sufficient support to enable one of ordinary skill in the art to make and/or use these claimed inventions.

**CONCLUSION**

Based on the foregoing amendments and remarks, the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims and allowance of this application.

**AUTHORIZATION**

The Commissioner is hereby authorized to charge any additional fees which may be required for consideration of this Amendment to Deposit Account No. 13-4500, Order No. 0720-4147.

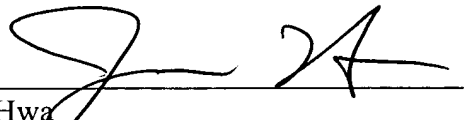
In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 13-4500, Order No. 0720-4147.

Respectfully submitted,  
MORGAN & FINNEGAN, L.L.P.

Dated: \_\_\_\_\_

6/21/06

By: \_\_\_\_\_



James Hwa  
Registration No. 42,680  
(202) 857-7887 Telephone  
(202) 857-7929 Facsimile

**Correspondence Address:**

MORGAN & FINNEGAN, L.L.P.  
3 World Financial Center  
New York, NY 10281-2101